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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,566	11/20/2001	Makoto Okada	1359.1057	8743

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

TRAN, NGHI V

ART UNIT PAPER NUMBER

2151

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/988,566

Applicant(s)

OKADA ET AL.

Examiner

Nghi V Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 1-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/25/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
2. The abstract of the disclosure is objected to because the abstract should be in narrative form and generally limited to a single paragraph within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 1-7 are objected to because of the following informalities:
4. Taking claim 1 as an exemplary claim, the preamble, "An object collaboration ... with a message/action reaction relationship" (emphasis added) appears to be a type error for --An object collaboration ... with a message action/reaction relationship--.
5. Claims 2-7 are also objected for the same reason set forth in claim 1 above.
Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Taking claim 1 as an exemplary claim, the functional limitation of the phrases "a message action/reaction relationship..." and "wherein ... a message type classifying/matching part ..." (emphasis added) renders the claim indefinite because it is unclear whether the "/" is "or", "and", or both. For the purpose of examination, the Examiner interprets "/" as "or".

9. Claims 4 and 6-7 are also rejected for the same reason set forth in claim 1 above.

10. Claims 2-3 and 5 are rejected under 35 U.S.C. 112, second paragraph, because directly or indirectly depend on claims 1 and 4 above.

Claim Rejections - 35 USC § 103

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11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riddle et al., U.S. Patent Number 6,412,000 (hereinafter Riddle), in view of Gleichauf et al., U.S. Patent Number 6,499,107 (hereinafter Gleichauf).

13. Taking claim 1 as an exemplary claim, Riddle teaches an object collaboration apparatus operated in accordance with a message action or reaction relationship, comprising: a message type classifying or matching part (item 304 of figure 3), the message type classifying or matching part stores and holds a message type dealt with by the message action or reaction relationship storing part, analyzes a message type of a received message, conducts matching processing for determining whether or not a type of the received message is matched with the message type dealt with by the message action or reaction relationship storing part, and if matched, gives the received message to the message action or reaction relationship storing part, and an action is executed in accordance with the message action or reaction relationship based on the message given to the message action or reaction relationship storing part (figure 4A-B and column 8, line 48 - column 9, line 63). However, Riddle is silent on a message receiving part for allowing each object to monitor and capture a message transmitted on

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a network; a message action or reaction relationship storing part for storing contents of an action that is a reaction to the message; and an action executing part for executing processing in accordance with the contents of an action.

In an object collaboration apparatus, Gleichuf discloses a message receiving part for allowing each object to monitor and capture a message transmitted on a network (item 100 of figure 4); a message action or reaction relationship storing part for storing contents of an action that is a reaction to the message (item 36 of figure 2); and an action executing part for executing processing in accordance with the contents of an action (column 6, lines 31-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Riddle in view Gleichuf by monitoring, capturing, and storing contents of an action because this feature increases "network security using intelligent packet analysis". It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Riddle in view of Gleichuf in order "to identify attacks upon the network" (see Gleichauf's abstract).

14. Claim 6 is also rejected for the same reason set forth in claim 1 above.

15. With respect to claim 2, Riddle further teaches classification of the message type has a hierarchy (column 9, line 20), and a message type header (column 9, line 24) representing the message type contains information representing the hierarchy of the classification of the message type, and by applying the hierarchy of the classification of

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the message type, the message type classifying or matching part stores and holds a message type dealt with by the message action or reaction relationship storing part, analyzes a message type of the received message, and conducts matching of the message type (column 9, lines 14-63 and column 11, lines 49-66).

16. With respect to claim 3, Riddle further teaches the message type is defined by using an idea of inheritance in object-oriented programming, and the hierarchy of the classification of the message type contains a hierarchy of classification of a class derivation message type and a class derivation origin message type (column 11, lines 25-45 and column 14, line 29 - column 15, line 26).

17. Taking claim 4 as an exemplary claim, Riddle teaches an object collaboration apparatus operated in accordance with a message action or reaction relationship, comprising: an entity name rewrite object for, with respect to a message received from one object entity, rewriting object entity name information in a message representing the one object entity to another object entity name information representing another object entity, and returning the message to the network (see table 1 i.e. policy inheritance; figure 2B; column 9, lines 28-41; and column 13, lines 35-62). The entity name rewrite object is interpreted as a policy inheritance and as a default class. However, Riddle is silent on a message receiving part for allowing each object to monitor and capture a message transmitted on a network; a message action or reaction relationship storing

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part for storing contents of an action that is a reaction to the message; and an action executing part for executing processing in accordance with the contents of an action.

In an object collaboration apparatus, Gleichuf discloses a message receiving part for allowing each object to monitor and capture a message transmitted on a network (item 100 of figure 4); a message action or reaction relationship storing part for storing contents of an action that is a reaction to the message (item 36 of figure 2); and an action executing part for executing processing in accordance with the contents of an action (column 6, lines 31-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Riddle in view Gleichuf by monitoring, capturing, and storing contents of an action because this feature increases "network security using intelligent packet analysis". It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Riddle in view of Gleichuf in order "to identify attacks upon the network" (see Gleichauf's abstract).

18. Claim 7 is also rejected for the same reason set forth in claim 4 above.

19. With respect to claim 5, Riddle further teaches synchronization processing between objects (figure 2B), action contents desired to be subjected to the synchronization processing are described by using the object entity name to be an entity name rewrite target by the entity name rewrite object, in the message action or reaction relationship storing part of an object to be a slave, and the entity name rewrite

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object rewrites the object entity name written as the entity name rewrite target into an object entity name to be a master object of the synchronization processing (see table 1 i.e. policy inheritance; figure 2B; column 9, lines 28-41; and column 13, lines 35-62 i.e. item 220, 224, or 225 interprets as "a slave" and item 226, 228, 230, or 232 interprets as "a master").

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. "Method and apparatus for securely transporting an information container from a trusted environment to an unrestricted environment," by Morar et al., U.S. Patent Number 6,678,822.

b. "System and method for rules-driven multi-phase network vulnerability assessment," by Gleichauf et al., U.S. Patent Number 6,324,656.

c. "Interaction monitor and interaction history for service applications," by Dan et al., U.S. Patent Number 6,401,111.

d. "E-mail usage pattern detection," by Barchi, U.S. Patent Number 6,507,866.

e. "Method and apparatus for object oriented interprocess message switching," by Foss et al., U.S. Patent Number 5,379,426.

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d. "Insertion, evasion, and denial of service: eluding network intrusion detection," by Thomas H. Ptacek et al.,
http://www.insecure.org/stf/secnet_ids/secnet_ids.html.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi V Tran
Examiner
Art Unit 2151

NT


ZARNI MAUNG
SUPERVISORY PATENT EXAMINER